12. Whiteaves, J. F.

Notes on some Fresh-water Shells from the Yukon Territory.

Ottawa Nat., Vol. XIX, 1905, pp. 63-65.

Certain records from Keewatin are also given.

13. Whiteaves, J. F.

Some new localities for Canadian Land and Fresh Water Shells.

Ottawa Nat., Vol. XIX, 1905, pp. 169-171.

14. Whiteaves, J. F.

List of Land and Fresh Water Shells from the District of Keewatin.

Rept. Geol. Survey Canada, 1905, p. 6.

15. Whiteaves, J. F.

List of some Fresh Water Shells from Northwestern Ontario and Keewatin.

Ottawa Nat., Vol. XX, 1906, pp. 31-32.

### A LIST OF THE MOLLUSKS COLLECTED BY MR. OWEN BRYANT ALONG THE COASTS OF LABRADOR, NEWFOUNDLAND AND NOVA SCOTIA

#### BY CHARLES W. JOHNSON

In the summer of 1908 the schooner Lorna Doone belonging to Dr. Wilfred T. Grenfell was chartered by a party including Mr. Owen Bryant and his brothers Dr. John Bryant and Mr. Edward S. Bryant. The vessel went as far north as the southern end of Cape Chidley Island. The most northern points at which Mr. Bryant collected were Mettek Island near Eclipse Harbor and Kowaktorvik Bay, north of Nachvak. In regard to collecting Mr. Bryant says: "I started out with the idea of collecting on land and had no intention of doing any dredging. On the way to St. John's the vessel happened to be drifting over part of the Grand Banks in about 50 fathoms of water, I collected a number of pelagic animals by using a butterfly net as a tow net. This gave me the idea of making use of any future opportunities by dredging. At St. Johns I had a blacksmith make me a dredge frame, had some netting sewed together to form a bag and bought 200 fathoms of rope, about one-half inch in diameter. The dredge often came in very hard, but we

had lots of man power on board; occasionally there were as many as fourteen men pulling on the rope, and by swaying we could get in only about four inches at a time, so you see we had plenty of exercise. Sometimes the vessel was being carried south by the Labrador current although we were sailing north in a very light breeze, and we had to pull the vessel ahead in order to get to the dredge. The dredge was practically always filled, and all the sand was washed through a sieve and every specimen I could see was saved from each haul."

I have added to this list the species collected by Mr. Bryant in Newfoundland in 1905 and 1906, part of this time being spent with Dr. Grenfell at St. Anthony. The following list of localities and stations where collecting was done, was given in full, as they are somewhat abbreviated in the list of species. Mr. Bryant presented the collection to the Boston Society of Natural History.

The bibliography bearing on the fauna of this region is quite extensive and that pertaining to the Mollusca is given by J. F. Whiteaves: Catalogue of the Marine Invertebrata of Eastern Canada, in Geol. Survey of Canada, 1901. Packard's The Labrador Coast, 1891, also contains an extensive bibliography and a list of the mollusks. Labrador, The Country and the People, by Wilfred T. Grenfell and others, contains a short article bearing on the mollusks collected by Mr. Bryant, which are here treated in detail.

# List of localities: Labrador

Mettek Island, near Eclipse Harbor, Sept. 5.

Kowaktorvik Bay, north of Nachvak, 5 fathoms, rocky, Aug. 28.

Outside of Hebron, 60 fathoms, gravel, Aug. 25. Off Hebron, 60 fathoms, mud and sand, Aug. 25.

Off Hebron, 100 fathoms, mud, Aug. 25. Off Fish Island, Hebron, 75 fathoms, Aug. 25.

Outside of Fish Island, Hebron, 80 fathoms, gravel, Aug. 25. Halfway between Cape Mugford and Hebron, 60 fathoms, mud and sand, Aug. 23.

Port Manvers, 30 fathoms, sticky mud, Aug.

Twenty miles N. E. of Nain, Aug. 20.

Nain, 7 fathoms, mud, Aug. 18.

Shoal Tickle, 20 miles S. E. of Nain, 25 fathoms, Aug. 15.

Off Beachy Island, 80 fathoms, soft mud, Aug. 22.

Egg Harbor, 7 fathoms, mud, Aug. 6.

Off Egg Harbor, 20 fathoms, mud, Aug. 10.

Indian Harbor, Aug. 12.

Gready Harbor, 12-15 fathoms, rocky, Aug. 8.

"Cock Capelin," Gready Harbor, Aug. 8.

Bateau, Aug. 1.

One mile N. of Battle Harbor, 50 fathoms, fine sand, Sept. 14. Off Cape Harrison, tow net, Aug. 13.

### NEWFOUNDLAND

Cape Norman, May 1, 1906.

Brehat Bay.

St. Anthony, 2 fathoms, May 4, 14 and June 1, 1906.

Hare Bay, Jan. 20, 1906.

Conche, tide pools, Apr. 20 and May 17, 1906.

Pilley's Island, Dec. 11, 1905.

Port Saunders and Hawks Bay, July 12 and Aug. 1, 1906. Seldom Come Bay, Fogo Island, July 28, and 29, 1908.

Funk Island, July 2, 1906.

Mouth of Serpentine River, July 1, 1905.

Off St. Lawrence Harbor, Placentia Bay, 59 and 53 fathoms, rocky, Sept. 29.

S. by E. of Burin, Placentia Bay, 100 to 110 fathoms, rocky, Sept. 28.

Off Cape Race, 30 fathoms, Sept. 26, 1908.

## St. Pierre

St. Pierre Harbor, 5 fathoms, rocky, Oct. 1, 1908. St. Pierre Bank, 30 fathoms, rocky, Oct. 2, 1908. Off Crew Point, 17 fathoms, rocky, Sept. 29, 1908.

### Nova Scotia

75 miles W. N. W. of Sable Island, 75 fathoms, fine sand, Oct. 5, 1908.

Roseway Bank, E. of Cape Sable, 45 fathoms, gravel, Oct. 6. 75 miles E. of Cape Sable, 105 fathoms, mud, Oct. 6.

55 miles E. of Cape Sable, 85 fathoms, mud, Oct. 6. 14 miles S. of Cape Sable, 45 fathoms, rocky, Oct. 7.

20 miles E. S. E. of Cape Sable, 70 fathoms, fine sand, Oct. 7. About 40 miles W. by S. of Cape Sable, 76 fathoms, black gravel, Oct. 8.

About 49 miles W. by S. of Cape Sable, 110 fathoms, gravel,

Oct. 8.

Browns Bank off Cape Sable. 40 fathoms, rocky, Oct. 8.

#### SCAPHOPODA

Dentalium entalis stimpsoni Henderson. U. S.—S. of C. Sable, 76 f.; 43 miles W. by S. of C. Sable, 110 f.; Browns Bk., 40 f. D. agile M. Sars. U. S.—55 miles E. of C. Sable, 85 f.; 75 miles E. of C. Sable, 105 f.

#### Gasteropoda

Acmæa testudinalis (Müll.). LAB.—Egg Hbr., 7 f.; Gready Hbr., 12 f.; Buteau. N. F.—St. Anthony, 2 f. on Pecten grandis; Seldome Come Bay; Serpentine R.

A. rubella (Fab.). LAB.—Gready Hbr., 12 f.

Lepeta cæca (Müll). Lab.—Off Hebron, 60 f.; off Fish I., 80 f.; between C. Mugford and Hebron, 60 f.; off Egg Hbr., 20 f. Large Hemithyris psittacea Gmel. were taken at the latter Sta. N. F.—Off C. Race, 30 f. H. psittacea were also dredged at this Sta.; S. by E. of Burin, 110 f. N. S.—Browns Bk., 40 f.

Puncturella princeps (Migh. & Ads.). Lab.—Egg Hbr., 7 f.; Shoal Tickle. St. Pierre, 5 f.; N. S.—S. W. of C. Sable, 40 f. Margarites helicina (Phipps). Lab.—Komaktorvik Bay, 5 f.;

20 miles N. E. of Nain; Gready Hbr., 14 f. N. F.—Conche.
M. umbilicalis var. spiralis Baker. Lab.—Komaktorvik Bay.

5 f.; off Fish I., 75 f.

M. olivacea Brown. Lab.—Between C. Mugford and Hebron, 60 f. Specimens vary in size from 4 to 9 mm. approaching the var. gigantea Leche; off Beachy I., 80 f.; Egg Hbr., 7 f.; Gready Hbr., 12 f.

M. groenlandica Gmel. Lab.—Nain, 7 f.; Egg Hbr., 7 f.; Gready Hbr., 12 f. N. F.—St. Anthony, 2 f. on Pecten grandis

 $\operatorname{Sol}$ .

M. groenlandica var. incarnata Couth. N. S.—Browns Bk.

40 f. S. W. of C. Sable, 40 f.

M. cinerea Couth. Lab.—Off Hebron, 60 f.; between C. Mugford and Hebron, 60 f.; Nain, 7 f.; Shoal Tickle; Egg Hbr., 7 to 20 f.; Gready Hbr., 12 f. N. F.—St. Lawrence Hbr., 50 f.

M. cinerea var. maxima. Lab.—Off Fish I., 75 f.

Solariella varicosa Migh. & Ads. Lab.—Between C. Mugford and Hebron, 60 f.; Shoal Tickle; off Egg Hbr., 7 to 20 f.; Gready Hbr., 15 f. N. of Battle Hbr. 50 f. N. F.—Off St. Lawrence Hbr., 50 f. N. S.—20 miles E. S. E. of C. Sable, 70 f.

S. varicosa var. bella Verk. N. S.—20 miles E. S. E. of C. Sable, 70 f.

Calliostoma occidentalis Beck. N. S.—40 miles W. by S. of C. Sable, 76 f.

Couthouyella striatula (Couth). N. S.—43 miles W. by S. of C. Sable, 110 f.

Odostomia (Amaura) candida (Möll). Lab.—Between C.

Mugford and Hebron, 60 f.; Egg Hbr., 7 f.

Epitonium greenlandicum (Perry), N. S.—14 miles S. of C. Sable, 45 f.; S. W. of C. Sable, 40 f.; 43 miles W. by S. of C.

Sable, 110 f.; Browns Bk., 40 f.

Natica clausa B. & S. Lab.—Port Manvers, 30 f.; off Beachy I., 80 f. N. F.—Off St. Lawrence Hbr., 50 f. N. S.—Browns Bk., 40 f.; 20 miles E. S. E. of C. Sable, 76 f.; 14 miles S. of C. Sable, 45 f. Terebratulina septentrionalis were abundant at this station, many being of a bright pink color.

Polinices heros (Say). N. F.—S. by E. of Burin, 100 f.

P. groenlandica Möll. N. S.—20 miles E. S. E. of C. Sable, 70 f.; 55 miles E. of C. Sable, 85 f.

P. immaculata Totten. N. S.—43 miles W. by S. of C. Sable,

110 f.

Amauropsis islandica Gmel. jur. Lab.—Off Beachy I., 80 f. Velutina laevigata (Linné). Lab.—Shoal Tickle. N. S.—I4 miles S. of C. Sable, 45 f.; 40 miles W. by S. of C. Sable, 76 f.; Browns Bk., 40 f.

V. undata Brown. LAB.—Between C. Mugford and Hebron,

60 f.

Marsenina glabra (Couth). Lab.—Shoal Tickle. N. S.—14 miles S. of C. Sable, 45 f.; S. W. of C. Sable, 40 f.; Browns Bk., 40 f.

Cingula areolata Stimp. N. S.—Browns Bk., 40 f.

C. carinata Migh. & Ads. N. S.—75 miles E. of C. Sable, 105 f.

C. castanea Möll. Lab.—20 miles N. E. of Nain; Shoal Tickle, 25 f. N. S.—Browns Bk., 40 f.

C. jan-mayeni Friele. N. S.—20 miles E. S. E. of C. Sable,

70 f.

CINGULA BRYANTI, n. sp. nov. Shell dark reddish brown, narrowly umbilicated, whorls about five, apical and following whorl smooth, the others with two prominent spiral ridges, crossed by less prominent longitudinal costae, that form slight nodes at their junction with the revolving ridges, body whorl with three smaller spiral ridges below the two prominent peripheral ridges. The longitudinal costae conspicuous above the peripheral ridges, between them obsolete, but both ridges slightly nodose. Height 2.5, width 1.5 mm.

Two specimens, 15 fms. off St. Lawrence Harbor, Newfoundland, and one specimen 25 fms. Shoal Tickle, 20 miles S. E. of

Nain, Labrador.

This species resembles in form the figure of Alvania zetlandica, Sars "Moll. Regionis Arcticae Norvegiae," Tab. 10, fig. 7, but with less prominent longitudinal costae. It also resembles C. jan-mayeni, but that is a larger and broader species, with only two sculptered whorls.

Onoba aculeus Gould. St. Pierre, 5 f.

Litorina littorea (Linné). N. F.—C. Narman, very large, some measuring 40 mm.; Hawkes Bay; Serpentine R.; Conche, tide pools; Seldome Come Bay; Pilley's I.

L. pallatia Say. N. F.—C. Norman; Seldome Come Bay;

Pilley I.

L. rudis. LAB.—Nain, tide water; Indian Hbr. N. F.—

Port Saunders; Funk I.; Pilley's I.: Conche, tide pools.

Lacuna vincta (Montg.). LAB.—Komatorvik Bay, 5 f.; Egg Hbr. 7 f.; Bateau. N. F.—Conche; Seldome Come Bay. St.

Pierre.—5 f.; off Crew Point, 17 f.

Tachyrhynchus reticulatus (Migh. & Ads.). Lab.—Off Fish I., 80 f.; Shoal Tickle, 25 f.; Gready Hbr. 12 f.; off Hebron 60 f. N. F.—Off C. Race, 30 f.; S. by E. of Burin, 110 f. St. Pierre.—5 f. N. S.—Browns Bk. 40 f.; 14 miles S. of C. Sable, 45 f.

T. erosa Couth. Lab.—Komaktorvik Bay, 5 f.; off Hebron, 100 f.; off Fish I., 75 f.; between C. Mugford and Hebron, 60 f.; Port Manvers, 30 f.; Shoal Tickle, 25 f.; Egg Hbr., 7 f.; off Beachy I., 80 f.; 1 mile N. of Battle Hbr., 50 f. N. S.—20 miles E. S. E. of C. Sable, 70 f.; 43 miles W. by S. of C. Sable, 110 f.; 40 miles W. by S. of C. Sable, 75 f.; 55 miles E. of C. Sable, 85 f.; 75 miles E. of C. Sable, 105 f.

Turritellopsis acicula Stimp. Lab.—Egg Hbr., 7 f. N. S.—S. W. of C. Sable, 40 f.; 43 miles W. by S. of C. Sable, 110 f.;

Browns Bk., 40 f.

Trichotropis borealis B. & S. Lab.—Between C. Mugford and Hebron, 60 f.; Shoal Tickle, 25 f.; off Egg Hbr., 7 and 20 f. N. S.—S. W. of C. Sable, 40 f.

Aporrhais occidentalis Beck. Lab.—Off Hebron, 60 f.; Egg Hbr., 7 and 20 f.; "Cock capelin," Gready Hbr. N. F.—Off St. Lawrence Hbr., 50 and 53 f.; S. by E. of Burin, 110 f.

Aporrhais occidentalis mainensis, n. var.

The specimens from the Gulf of Maine and Bay of Fundy differ from the typical form from the Gulf of St. Lawrence northward, in having fewer and more elevated longitudinal costae. The type calls for 25 costae, while those from the Gulf of Maine have only 14 on the penultimate whorl, the number being quite constant, while those from Labrador have from 22 to 25 costae. In the Gulf of Maine specimen the costae in the young end abruptly at the periphery and the peripheral line is

noticable on the entire body whorl to the tip of the wing-like lip, there is also a slight sub-peripheral line; both of these are obsolete or wanting in the more northern specimens. The variety is based chiefly on a large series dredged by Dr. C. W. Townsend in from 5 to 6 fms. near the Gillpatrick Ledge off Northeast Harbor, Maine. The figure by Gould represents this variety. It was found by Mr. Bryant 20 miles E. S. E. of Cape Sable, N. S., in 70 fms.

Trophon clathratus (Linné). Lab.—Shoal Tickle, 25 f.; off Egg Hbr., 7 f. N. F.—S. by E. of Burin, 100 f. N. S.—55

miles E. of C. Sable, 85 f.

T. clathratus var. gunneri Lovén). N. S.—Browns Bk., 40 f.
T. scalariformis Gould. Lab.—Shoal Tickle, 25 f.; off
Beachy I., 80 f. Confused with T. clathratus but distinguished
by its sharp elevated ribs with fine spiral lines in the interstices.

T. truncatus (Ström). LAB.—Shoal Tickle. 25 f.; Gready I.,

12 f. N. S.—S. W. of C. Sable, 40 f.

Thais lapillus (Linné). N. F.—C. Norman, in earth above high water; Seldome Come Bay; mouth of Serpentine R.

Astyris rosacea (Gould). N. S.—Browns Bk., 40 f.; S. W. of

C. Sable, 40 f.; 14 miles S. of C. Sable, 45 f.

A. holböllii (Möll.). Lab.—Shoal Tickle, 25 f. Distinguished from A. rosacea by its narrower form and prominent transverse ribs.

Alectrion (Tritia) trivittata (Say). St. Pierre.—5 f.

Buccinum cyaneum Brug. Lab.—Indian Hbr. N. F.—St.

Anthony; Conche, tide pools.

B. donovani Gray. Lab.—Off Hebron, 60 f.; between C. Mugford and Hebron, 60 f.; Nain, 7 f.; Shoal Tickle, 25 ft.; Egg Hbr., 7 ft.; off Egg Hbr., 20 ft.; Gready Hbr., 12 f. N. F.—S. by E. of Burin, 110 f.

B. groenlandicum Mörch. LAB.—Between C. Mugford and

Hebron, 60 f.

B. humphreysianum Bennett. Lab.—Between C. Mugford and Hebron, 60 f.

B. tenue Gray. N. S.—20 miles E. S. E. of C. Sable, 70 f.

B. tottenis Stimp. Lab.—Between C. Mugford and Hebron, 60 f. N. F.—Off St. Lawrence, 50 f.; S. by E. of Burin, 100 f.

B. undatum Linné. Lab.—Mettek I.; off Hebron, 60 f.; between C. Mugford and Hebron, 60 f.; Nain, 7 ft.; Egg Harbor, 20 f.; off Beach I., 80 f.; Bateau, Gready Hbr., 12 f. N. F.—C. Norman, St. Anthony. Conche. St. Pierre—5 f. (scalariform). N. S.—14 miles S. of C. Sable, 45, and 45 W. by S. of Cape Sable, 110 f.

B. undatum var. striatum Penn. Lab.—Off Hebron, 60 f.; off

Fish I., 80 f.; Indian Hbr.

Plicifusus kroyeri (Möll.) (Buccinum cretaceum Reeve). Lab.—Off Egg Hbr., 20 f.

Beringius largillierti Petit. N. F.-Off St. Lawrence Hbr.,

50 f.

Chrysodomus despectus var. tornatus (Gld.). Lab.—Off Fish I., 80 f.; between C. Mugford and Hebron, 60 f. N. F.—Off St. Lawrence Hbr., 50 f.

C. decemcostatus (Say). N. S.—Browns Bk., 40 f.; 20 miles

E. S. E. of C. Sable, 70 f.

Colus islandicus (Linné). Lab.—Off Fish I., 75 f.; off Beachy I., 80 f.

C. stimpsonii (Mörch). N. S.-Browns Bk., 40 f.

(To be continued.)

### EDWARD SYLVESTER MORSE

In the death of Professor Edward S. Morse, which occurred December 20, 1925, the world has lost a great naturalist. was born in Portland, Maine, June 18, 1838, and from childhood was a close observer of nature. At the age of 13 he had made a noteworthy collection of shells, and in 1857, at the age of 19, he published his first paper, "Description of a new species of Helix" [asteriscus], Proc. Boston Soc. Nat. Hist., vol. 6, p. 138. In 1859, in the same publication, he described H. milium. In 1859 he became one of Professor Louis Agassiz's special students at the Museum of Comparative Zoology, where he continued his studies until 1862. In 1864 he published his "Observations on the Terrestrial Pulmonifera of Maine" (Jour. Portland Soc. Nat. Hist., vol. 1). Professor Morse made the remark one day that what induced him to make a study of the small land shells was a frequent statement of Prof. Agassiz: that you will not find a very small and a large species in the same genus. In this memorable paper careful anatomical studies of these minute mollusks proved this to be true, and led him to propose seven new genera for species previously referred to the genus Helix. His remarkable ability as an artist, which was early exhibited, enabled him to show the radulæ, jaws and other features illustrating these genera in a clear and most instructive manner.